# Performance Data Sheet

## AWF5516EVA

## General Information

| | | | |
|---|---|---|---|
| **Model** | AWF5516EVA | **Refrigerant** | R-22 |
| **Test Condition** | ARI | **Performance Test Voltage** | 220V ~ 50HZ |
| **Return Gas** | 18.3°C (65°F) RETURN GAS | **Motor Type** | PSC |

## Performance Information

| Evap Temp (°F) | | Condensing Temperature (°F) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 80 | 90 | 100 | 110 | 120 | 130 | 140 |
| -15 | Btu/h | 3480 | 2870 | | | | | |
| | Watts | 550 | 527 | | | | | |
| | Amps | 2.67 | 2.54 | | | | | |
| | Lb/h | 44.8 | 38.5 | | | | | |
| -10 | Btu/h | 4330 | 3690 | 3020 | | | | |
| | Watts | 604 | 594 | 570 | | | | |
| | Amps | 2.92 | 2.86 | 2.73 | | | | |
| | Lb/h | 55.5 | 49.2 | 42.1 | | | | |
| -5 | Btu/h | 5270 | 4590 | 3880 | 3160 | | | |
| | Watts | 651 | 654 | 643 | 618 | | | |
| | Amps | 3.13 | 3.13 | 3.08 | 2.95 | | | |
| | Lb/h | 67.2 | 60.8 | 53.5 | 45.6 | | | |
| 0 | Btu/h | 6310 | 5580 | 4810 | 4040 | 3270 | | |
| | Watts | 691 | 706 | 708 | 697 | 674 | | |
| | Amps | 3.31 | 3.37 | 3.38 | 3.33 | 3.21 | | |
| | Lb/h | 79.9 | 73.3 | 65.9 | 57.8 | 49.1 | | |
| 5 | Btu/h | 7440 | 6650 | 5830 | 5000 | 4170 | | |
| | Watts | 724 | 752 | 767 | 769 | 759 | | |
| | Amps | 3.45 | 3.58 | 3.65 | 3.67 | 3.62 | | |
| | Lb/h | 93.7 | 86.9 | 79.3 | 70.9 | 62.0 | | |
| 10 | Btu/h | 8690 | 7840 | 6950 | 6050 | 5160 | 4290 | 3480 |
| | Watts | 749 | 791 | 819 | 834 | 838 | 831 | 814 |
| | Amps | 3.56 | 3.74 | 3.88 | 3.97 | 4.00 | 3.95 | 3.84 |
| | Lb/h | 109 | 102 | 93.8 | 85.1 | 75.9 | 66.4 | 56.7 |
| 15 | Btu/h | 10100 | 9140 | 8170 | 7200 | 6230 | 5290 | 4400 |
| | Watts | 767 | 823 | 864 | 893 | 911 | 917 | 914 |
| | Amps | 3.63 | 3.87 | 4.08 | 4.23 | 4.33 | 4.37 | 4.33 |
| | Lb/h | 125 | 118 | 110 | 101 | 91.0 | 81.1 | 71.0 |
| 20 | Btu/h | 11600 | 10600 | 9510 | 8450 | 7400 | 6370 | 5400 |
| | Watts | 778 | 848 | 903 | 946 | 977 | 998 | 1010 |
| | Amps | 3.67 | 3.97 | 4.24 | 4.46 | 4.63 | 4.74 | 4.79 |
| | Lb/h | 143 | 135 | 127 | 117 | 107 | 97.0 | 86.4 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **25** | Btu/h | 13200 | 12100 | 11000 | 9830 | 8680 | 7560 | 6490 |
| | Watts | 782 | 866 | 935 | 992 | 1040 | 1070 | 1100 |
| | Amps | 3.68 | 4.04 | 4.37 | 4.66 | 4.90 | 5.08 | 5.20 |
| | Lb/h | 162 | 154 | 145 | 135 | 125 | 114 | 103 |
| **30** | Btu/h | 15000 | 13800 | 12600 | 11300 | 10100 | 8860 | 7680 |
| | Watts | 780 | 877 | 961 | 1030 | 1090 | 1140 | 1180 |
| | Amps | 3.66 | 4.08 | 4.47 | 4.82 | 5.13 | 5.38 | 5.58 |
| | Lb/h | 183 | 175 | 165 | 155 | 144 | 133 | 121 |
| **35** | Btu/h | 17000 | 15700 | 14300 | 13000 | 11600 | 10300 | 8990 |
| | Watts | 770 | 881 | 980 | 1070 | 1140 | 1200 | 1260 |
| | Amps | 3.62 | 4.09 | 4.53 | 4.95 | 5.32 | 5.65 | 5.93 |
| | Lb/h | 205 | 197 | 187 | 176 | 165 | 153 | 141 |
| **40** | Btu/h | 19100 | 17700 | 16200 | 14700 | 13300 | 11800 | 10400 |
| | Watts | 753 | 879 | 992 | 1090 | 1180 | 1260 | 1330 |
| | Amps | 3.55 | 4.07 | 4.57 | 5.05 | 5.49 | 5.89 | 6.24 |
| | Lb/h | 230 | 221 | 211 | 199 | 187 | 175 | 162 |
| **45** | Btu/h | 21400 | 19900 | 18300 | 16700 | 15100 | 13500 | 12000 |
| | Watts | 729 | 870 | 998 | 1110 | 1220 | 1310 | 1390 |
| | Amps | 3.46 | 4.03 | 4.59 | 5.12 | 5.63 | 6.10 | 6.53 |
| | Lb/h | 256 | 247 | 236 | 224 | 211 | 198 | 185 |
| **50** | Btu/h | 23900 | 22200 | 20500 | 18800 | 17000 | 15300 | 13700 |
| | Watts | 698 | 854 | 997 | 1130 | 1250 | 1350 | 1450 |
| | Amps | 3.35 | 3.97 | 4.58 | 5.17 | 5.74 | 6.28 | 6.78 |
| | Lb/h | 285 | 274 | 263 | 251 | 237 | 224 | 210 |
| **55** | Btu/h | 26600 | 24800 | 22900 | 21100 | 19200 | 17300 | 15500 |
| | Watts | 660 | 832 | 990 | 1140 | 1270 | 1390 | 1510 |
| | Amps | 3.21 | 3.88 | 4.54 | 5.20 | 5.83 | 6.43 | 7.00 |
| | Lb/h | 315 | 304 | 292 | 279 | 265 | 251 | 236 |

| COEFFICIENTS | CAPACITY | POWER | CURRENT | MASS FLOW |
|---|---|---|---|---|
| C1 | 8.435518E+03 | -5.467547E+01 | 1.771134E+00 | 7.504154E+01 |
| C2 | 2.969679E+02 | -1.330683E+01 | -3.589718E-02 | 2.675328E+00 |
| C3 | 3.996520E+01 | 1.745660E+01 | 2.145781E-02 | 9.457204E-01 |
| C4 | 3.397542E+00 | -1.780818E-01 | -5.085975E-04 | 2.862954E-02 |
| C5 | -9.440298E-01 | 2.537777E-01 | 4.826006E-04 | 2.182620E-03 |
| C6 | -1.114090E+00 | -1.153707E-01 | 7.538289E-05 | -1.384599E-02 |
| C7 | 1.258588E-02 | 3.853326E-05 | 2.152785E-06 | 1.350275E-04 |
| C8 | -1.647376E-02 | 4.295001E-04 | -2.724969E-06 | -7.908468E-05 |
| C9 | -7.499121E-04 | 3.683416E-05 | 4.518799E-06 | -3.228589E-05 |
| C10 | 3.521285E-03 | 1.708312E-04 | -1.287174E-06 | 3.472334E-05 |

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature

# Performance Data Sheet

## AWF5516EVA

## General Information

| | | | |
|---|---|---|---|
| **Model** | AWF5516EVA | **Refrigerant** | R-22 |
| **Test Condition** | ARI | **Performance Test Voltage** | 265V ~ 60HZ |
| **Return Gas** | 18.3°C (65°F) RETURN GAS | **Motor Type** | PSC |

## Performance Information

| Evap Temp (°F) | | Condensing Temperature (°F) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 80 | 90 | 100 | 110 | 120 | 130 | 140 |
| -15 | Btu/h | 3720 | 2970 | | | | | |
| | Watts | 663 | 602 | | | | | |
| | Amps | 2.64 | 2.44 | | | | | |
| | Lb/h | 47.9 | 40.0 | | | | | |
| -10 | Btu/h | 4860 | 4050 | 3250 | | | | |
| | Watts | 746 | 701 | 651 | | | | |
| | Amps | 2.92 | 2.77 | 2.60 | | | | |
| | Lb/h | 62.2 | 54.0 | 45.3 | | | | |
| -5 | Btu/h | 6100 | 5230 | 4360 | 3490 | | | |
| | Watts | 815 | 787 | 753 | 712 | | | |
| | Amps | 3.15 | 3.06 | 2.94 | 2.79 | | | |
| | Lb/h | 77.6 | 69.2 | 60.3 | 50.6 | | | |
| 0 | Btu/h | 7450 | 6510 | 5570 | 4630 | 3690 | | |
| | Watts | 872 | 860 | 842 | 817 | 785 | | |
| | Amps | 3.35 | 3.32 | 3.25 | 3.16 | 3.04 | | |
| | Lb/h | 94.3 | 85.6 | 76.4 | 66.4 | 55.5 | | |
| 5 | Btu/h | 8930 | 7910 | 6890 | 5880 | 4860 | | |
| | Watts | 917 | 922 | 920 | 910 | 892 | | |
| | Amps | 3.50 | 3.53 | 3.52 | 3.49 | 3.42 | | |
| | Lb/h | 112 | 103 | 93.7 | 83.4 | 72.2 | | |
| 10 | Btu/h | 10500 | 9440 | 8330 | 7230 | 6120 | 5020 | 3910 |
| | Watts | 951 | 973 | 987 | 992 | 989 | 977 | 957 |
| | Amps | 3.62 | 3.71 | 3.76 | 3.78 | 3.77 | 3.72 | 3.65 |
| | Lb/h | 132 | 122 | 112 | 102 | 90.2 | 77.5 | 63.6 |
| 15 | Btu/h | 12300 | 11100 | 9900 | 8700 | 7500 | 6300 | 5090 |
| | Watts | 974 | 1010 | 1040 | 1070 | 1080 | 1080 | 1070 |
| | Amps | 3.70 | 3.85 | 3.96 | 4.04 | 4.08 | 4.09 | 4.07 |
| | Lb/h | 153 | 143 | 133 | 122 | 110 | 96.5 | 82.1 |
| 20 | Btu/h | 14200 | 12900 | 11600 | 10300 | 9000 | 7690 | 6390 |
| | Watts | 987 | 1050 | 1090 | 1130 | 1160 | 1170 | 1180 |
| | Amps | 3.74 | 3.96 | 4.14 | 4.27 | 4.37 | 4.44 | 4.47 |
| | Lb/h | 175 | 165 | 154 | 143 | 131 | 117 | 102 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **25** | Btu/h | 16300 | 14900 | 13500 | 12000 | 10600 | 9210 | 7790 |
| | Watts | 992 | 1070 | 1130 | 1190 | 1230 | 1260 | 1280 |
| | Amps | 3.76 | 4.04 | 4.28 | 4.48 | 4.63 | 4.75 | 4.84 |
| | Lb/h | 200 | 189 | 178 | 166 | 153 | 139 | 124 |
| **30** | Btu/h | 18500 | 17000 | 15500 | 13900 | 12400 | 10900 | 9320 |
| | Watts | 988 | 1080 | 1160 | 1230 | 1290 | 1340 | 1370 |
| | Amps | 3.75 | 4.10 | 4.40 | 4.65 | 4.87 | 5.05 | 5.19 |
| | Lb/h | 226 | 215 | 203 | 191 | 177 | 163 | 147 |
| **35** | Btu/h | 21000 | 19300 | 17600 | 16000 | 14300 | 12700 | 11000 |
| | Watts | 976 | 1090 | 1190 | 1280 | 1350 | 1410 | 1460 |
| | Amps | 3.71 | 4.12 | 4.49 | 4.81 | 5.08 | 5.32 | 5.51 |
| | Lb/h | 254 | 242 | 230 | 217 | 203 | 188 | 172 |
| **40** | Btu/h | 23600 | 21800 | 20000 | 18200 | 16400 | 14600 | 12800 |
| | Watts | 957 | 1090 | 1210 | 1310 | 1400 | 1480 | 1540 |
| | Amps | 3.64 | 4.13 | 4.56 | 4.94 | 5.27 | 5.57 | 5.82 |
| | Lb/h | 284 | 272 | 259 | 246 | 231 | 216 | 199 |
| **45** | Btu/h | 26400 | 24500 | 22500 | 20600 | 18600 | 16700 | 14800 |
| | Watts | 932 | 1080 | 1220 | 1340 | 1450 | 1540 | 1620 |
| | Amps | 3.56 | 4.11 | 4.60 | 5.05 | 5.45 | 5.80 | 6.11 |
| | Lb/h | 316 | 304 | 291 | 277 | 262 | 245 | 228 |
| **50** | Btu/h | 29500 | 27400 | 25300 | 23200 | 21100 | 19000 | 16900 |
| | Watts | 902 | 1070 | 1230 | 1370 | 1490 | 1600 | 1690 |
| | Amps | 3.45 | 4.07 | 4.63 | 5.14 | 5.60 | 6.02 | 6.39 |
| | Lb/h | 351 | 338 | 324 | 309 | 294 | 277 | 259 |
| **55** | Btu/h | 32700 | 30500 | 28200 | 25900 | 23700 | 21400 | 19200 |
| | Watts | 867 | 1060 | 1230 | 1390 | 1530 | 1650 | 1760 |
| | Amps | 3.32 | 4.01 | 4.64 | 5.22 | 5.74 | 6.22 | 6.65 |
| | Lb/h | 388 | 374 | 360 | 344 | 328 | 311 | 292 |

| COEFFICIENTS | CAPACITY | POWER | CURRENT | MASS FLOW |
|---|---|---|---|---|
| C1 | 1.504566E+04 | 6.921393E+02 | 2.094390E+00 | 1.621415E+02 |
| C2 | 4.031456E+02 | -2.353583E+01 | -7.701225E-02 | 3.846565E+00 |
| C3 | -9.635077E+01 | 5.481363E+00 | 3.521617E-02 | -1.017551E+00 |
| C4 | 3.805257E+00 | -2.870513E-01 | -9.422156E-04 | 3.098047E-02 |
| C5 | -1.513062E+00 | 4.964144E-01 | 1.567674E-03 | -3.752008E-03 |
| C6 | 2.504494E-02 | -4.271898E-02 | -2.777339E-04 | 4.217735E-03 |
| C7 | 1.311098E-02 | 9.541913E-04 | 2.647591E-06 | 1.348406E-04 |
| C8 | -1.647019E-02 | 6.007595E-04 | 2.014446E-06 | -5.515995E-05 |
| C9 | 1.246021E-04 | -9.400407E-04 | -2.177966E-06 | -1.295071E-05 |
| C10 | -8.776604E-05 | 2.885844E-05 | 4.135786E-07 | -2.620789E-05 |

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature